IT 200 Fundamentals Info Technology

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April 4, 2020

**Project One: Technology, Hardware, and Software**

James Otis Tax Associates, small tax preparation company has begun to rapidly increase their requirements for new hardware and software systems compatible for their senior employees. Request for recommendations and reports of system parameters of capabilities for these employees needs, must be for secure and connected systems. Understanding the longevity of the hardware components with the combined security of software components, will give a more reliable system for retention hires.

I’ll recommend standard components with off the shelf connect and “easy to use” systems/ programs to cut on installing cost/time. Making each set easy to replicate for expansion in future use and replacement cost, incase system get damaged. Having a redundant system that can be easily mirrored will gain better focus on operations and easy to follow workflow.

**Certified Public Accountant (CPA):** *The CPA is a senior position at a tax preparation company. The CPA will be not only handling sensitive customer data from personal tax returns but also preparing tax returns for corporate clients. The CPA is also responsible for the personal tax returns filled out by the tax and data-entry specialist employees.* (20EW4, 2020)

**Recommendations:** For the CPA they will require a system for easy connection and formal use, relating closely to their job needs while also being able to work close at home. Keeping professional desktop on sight. ***HP EliteOne 800 G5 23.8-in All-In-One PC – Customizable*** (Customizable, 2020) System comes standardized with

**Software:** Software components are a must check for all formatted needs of the CPA, to their daily access and function.

Windows 10 Pro – Giving the access to Excel, Word, and Microsoft Teams function for shared talk and documents.

Turbo Tax – for general public use and setup

Adobe Acrobat - for scanning and changing documents.

**Hardware:**

9th Generation Intel Core i5 processor – faster login time and loading data.

8 GB memory; 128 GB M.2 SSD storage – good storage but mainly used as needed.

23.8" diagonal FHD display (Touch optional) – reduced stress and updated need for touch screen.

Intel UHD Graphics 630 – graphics come standard not really needed but good for loading informational videos.

Connected to the company VPN and has auto download to cloud information. A routine save of company data will be put on a 14TB external hard drive by WD Elements Desktop. Which will hold whatever formatted information directed by the company manager. Access to a Lenovo 15.6" ThinkPad X1 Extreme Laptop, for home use which will be setup for company use given access with VPN login.

**Tax Specialist:** *The tax specialist has the dual role of entering data and verifying that tax returns are correct. This position involves customer interaction in gathering data for minimizing taxes owed or maximizing tax refunds.* (20EW4, 2020)

**Recommendations:** I mirrored the same setup from the CPA will mildly changes. Giving the Tax Specialist a HP EliteOne 800 G5 23.8-in All-In-One PC – Customizable (Customizable, 2020) System comes standardized with

**Software:** Software components are a must check for all formatted needs of the Tax Specialist, to their daily access and function.

Windows 10 Pro – Giving the access to Excel, Word, and Microsoft Teams function for shared talk and documents.

Turbo Tax – for general public use and setup since they need to verify tax returns.

Adobe Acrobat - for scanning and changing documents.

**Hardware:**

9th Generation Intel Core i5 processor – faster login time and loading data.

8 GB memory; 128 GB M.2 SSD storage – good storage but mainly used as needed.

23.8" diagonal FHD display (Touch optional) – reduced stress and updated need for touch screen.

Intel UHD Graphics 630 – graphics come standard not really needed but good for loading informational videos.

Tax Specialist will also have a external hard drive by WD, for on hand data backup and accountability. System is linked to cloud network for sharing information and relaying messages to CPA, Data-Entry Specialist, or the Manager.

**Data-Entry Specialist:** *This position requires data entry for personal tax returns for customers who walk in the door. Although the data-entry specialist works with sensitive customer data, they do not have access to the tax returns once the returns are submitted to the tax specialist for review.* (20EW4, 2020)

**Recommendations:** I mirrored the same setup from the CPA and Tax Specialist with mildly changes. Giving the Data-Entry Specialist a HP EliteOne 800 G5 23.8-in All-In-One PC – Customizable (Customizable, 2020) System comes standardized with

**Software:** Software components are a must check for all formatted needs of the Data-Entry Specialist, to their daily access and function.

Windows 10 Pro – Giving the access to Excel, Word, and Microsoft Teams function for shared talk and documents.

Turbo Tax – for general public use and setup to have information flow directly to Tax Specialist.

Adobe Acrobat - for scanning and changing documents.

**Hardware:**

9th Generation Intel Core i5 processor – faster login time and loading data.

8 GB memory; 128 GB M.2 SSD storage – good storage but mainly used as needed.

23.8" diagonal FHD display (Touch optional) – reduced stress and updated need for touch screen.

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Keeping to format I wanted the Data Entry to have the same capabilities but have the information go directly to Tax Specialist. They would share a folder that would encrypt the data once it hit the Tax Specialist combined folder. Locking out the Data-Entry Specialist for the added security function layout in the management perimeters.

**For each employee, you must:**

**Describe all hardware components, including peripherals, needed to create the systems**

**Identify specific software programs (more than one) that would be beneficial to each identified employee. Programs could include:**

* **Operating systems**

I picked basic OS that anyone person come in “cold” be able to work on directly with little to no down time. I see the Data-Entry position being an Entry level since they deal with the public more openly, the data is encrypted to the Tax Specialist. I made it a easy system across the board so then retention rate could be maintain in the future. Knowing that you’re pretty much given the same level of system as everyone else makes it easy to back track problems and promote people within easier without training on a new system. With a easy related system such as Microsoft Pro giving the Outlook, Word, Excel, Microsoft Team helps deliver a solid package of performance and relatable work effect. With the added workplace printer for all known printed needed documents.

**Applications such as:**

* **Office automation products**

Having the Cloud as a backup with plus giving the added use of the external hard drive gives enough system backup for incase work mishaps.

* **Security products**

Added a Firewall and a network VPN for safety of internal work-related activity. Firewall would help give limited access to the Web to focus workload. And VPN network would make sure all work related documents don’t leave offboard unless given access.

**Describe security measures needed support this system. Security measures could focus on:**

* **Access**
* **Administration and user passwords**
* **Firewalls**

Access would require each person to be educated on password tends and guidelines, along with regular data security information. This would help reduce common mistakes and damage to business reputation of exposed data breaches.

***Password Guidance for Users*** (Solutions, 2019)

* *Don't use a password that is the same or similar to one you use on any other websites*
* *Don't use a single word, for example, password, or a commonly-used phrase like* ***Iloveyou*** *or***password123**
* *Make passwords hard to guess, even by those who know a lot about you, such as the names and birthdays of your friends and family, your favorite bands, and phrases you like to use.*
* *Participate in annual employee security training*

**Along with each description, explain the purpose of each technology component in each system. In your explanation, include how your knowledge of human-computer interaction (HCI) impacted your choices for components.**

**General plan:**

Overall, I’ll have Windows installed to all components and make a shared network with personal locked folders for each specialized employee. I figure if the CPA needs to shared data from the Tax Specialist, they need to have open link or shared folder that stays internal to the company. I’ll have their system set up with a firewall and VPN connection to secure all data collected by the agencies. Since we’re collecting SSN (social security numbers) and tax information’s we’ll need data backups and Encrypted SSD for safety of personal information. If the company wants to offboard this information to server of their choice the Encrypted SSD will be a added security or used for more “hands on” data backups. We can have a unique login for CEO and IT personal given cloud access able to keep a running log who logs in and opens what files can be setup, along with easily shared information.

**Sources:**

2019 Password Policy Best Practices

Rose Doherty - <https://www.intellisuite.com/blog/2019-password-policy-best-practices>

(Customizable, 2020)

(20EW4, 2020)